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An original full length human TPO cDNA clone in Bluescript (PHTPO-BS) was submitted to site-directed mutagenesis to produce plasmid pHTPO (M1)-BS. The mutations incorporated two stop codons, as well as an EcoRI site for confirmation, in the region immediately upstream from the transmembrane region of the human TPO gene. The entire full length human TPO gene sequence is given in AAQ31493 for comparison. As a consequence of the mutation, a "truncated" human TPO protein is expressed which is secreted by the host cell rather than bound to is
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Length 3072; other 14; 0 DB ;, Score 3062.4; Pred. No. 0; G; 565 Sequence 3072 BP; 689 A; 928 C; 890 Query Match Best Local Similarity 99.8%; Matches 3066; Conservative

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    Human thryoid peroxidase
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                 is used in the formation of plasmid expression vectors suitable for production of the enzyme in a secretable form from chinese hamster ovary cells (CHO). The recombinant hTPO produced by the transformed cells is useful as an assay reagent for the determination of
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(first entry)

23-OCT-1995

AAQ90304

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ΟŊ	1633	tcagcccatggacattactccgtgga	1692
qq	1621	gtggctgcaccaggctttcttcagcccatggacattactccgtggaggtggtttgga	1680
οy	1693	caagaccagccaaactgcaggtgcag	1752
qa	1681	cactaatacgaggccttcttgcaagaccagccaaactgcaggtgcaggatcagctgat	1740
ΟŊ	1753	aggagctgacggaaaggctcttgtgctgtccaattccagcaccttggatctggc	1812
qq	1741	acgaggagctgacggaaaggctctttgtgctgtccaattccagcaccttggatctgg	1800
QY	1813	cagaggggccgggaccacgggctgccaggttacaatgagtggaggga	1872
QQ	1801	ccatcaacctgcagaggggccgggaccacgggctgccaggttaca	1860
QY	1873	gagaccccgctgacctgagcaca	1932
qa	1861	ctgcggcctgcctcgcctggagacccccgctgacctgagcacagccatcgccagcag	1920
Qy	1933	cgtggccgacaagatcctggacttgtacaagcatcctgacaacatcgatgtctggct	1992
qa	1921	gogiggocgacaagatcciggactigtacaagcatccigacaacatcgatgtctggc	1980
δλ	1993	ggaggettagetgaaaacttecteecagggeteggaeagggeeetgtttgeetgtete	2052
q	1981	gaggettagetgaaaaetteeteeceagggeteggacagggeeeetgtttgeetgtet	2040
Qy	2053	gaagcagatgaaggctctgcgggacggtgactggttttggtgggagaaca	2112
q	2041	ttgggaagcagatgaaggctctgcgggatggtgactggttttggtggggagaacagcca	
QY	2113	tcttcacggatgcacagaggcgtgagctggagaagcactccctgtctcgggtcatc	2172
qq	2101	cttcacggatgcacagaggcgtgagctggagaagcactcctgtcttgggtcatctg	2160
ογ	2173	gcctcaccagggtgcccatggatgccttccaagtcggcaaattcccc	2232
qq	2161	acaacactggcctcaccagggtgcccatggatgccttccaagtcggcaaattcctfg	2220
Οy	2233	actttgagtcttgtgacagcatcactggcatgaacctggaggcctggagggaaac	2292
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Οy	2293	ctcaagacgacaagtgtgggttcccagagagcgtggagaatggggactttgtgcactg	2352
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                                                       A recombinant TPO wherein amino acids 713-721 have been deleted or replaced is claimed. The recombinant TPO may be expressed in non-thyroidal eukaryotic cells and, like native human TPO, is enzymatically active, is expressed on the cell surface, and is
                                                                                                                                              Length 3045;
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Peptide comprising disease associated B-cell epitope(s) thyroid peroxidase - used for diagnosis and treatment of diseases e.g. Hashimoto's thyroiditis
                                                                                                                 other;
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                                      Disclosure; Page 100 + Fig 7; 131pp;
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                                                                                                                                                                       an; thyroid peroxidase; autoantibody; autoimmune thyroid disease; disease; Hashimoto's thyroiditis.
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Best Local Similarity 99.3%;
Matches 2826; Conservative
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P-PSDB; AAW48781.
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	O cgcgggccctgcttcctggccggagacgg. 	O ctgcacacgctgtggctgcgcgagcacaa 	O gegcactggagegeggaegeegtgtacea 	O cagatcatcacctgagggattacatcco 	O tacgtgggtccctatgaaggctatgactc 	O tccacagccgccttccgcttcggccatgo	0 gocagottccaggagcacocogacotgco 	0 ccatggacattactccgtggaggtggttt. 	O ccagccaaactgcaggtgcaggatcagct 	0 gtgctgtccaattccagcaccttggatct 	0 cacgggctgccaggttacaatgagtggag 	0 cccgctgacctgagcacagccatcgccag 	O tacaagcatcctgacaacatcgatgtctg. 	0 agggctcggacagggccctgtttgcctg 	O gacggtyactggttttggtgggagaacag 	0 ctggagaagcactccctgtctcgggtcat. 	O atggatgccttccaagtcggcaaattccc 	0 ggcatgaacctggaggcctggagggaaac

2340 2439 2499 2619 2679 2640 2379 2400 2460 2559 2520 2580 2739 2700 2799 2760 2820 Thyroid peroxidase; hTPO; antigen; antibody; anti-human; diagnosis; thyroid disease; severe myasthenia; lupoid hepatitis; insulin dependent pediatric diabetes; ss. tattcctgccggcacgggtatgagctccaaggccgggagcagctcacttgcacccaggaa New antigen for immunological determination of anti-human thyroid peroxidase antibody - and recombinant human thyroid peroxidase 2860 actcacaggctgccgagagccctctga 2886 Human thyroid peroxidase hTPO DNA. ВР AAX37301 standard; DNA; 2546 97JP-0273743 97JP-0273743 (first entry) WPI; 1999-291616/25. P-PSDB; AAY07733. (SRLS-) SRL KK JP11094833-A. Homo sapiens 19-SEP-1997; 19-SEP-1997; 02-JUL-1999 09-APR-1999. AAX37301; 9 2380 2320 2281 2341 2440 2401 2500 2461 2560 2521 2740 2800 2761 2821 RESULT QQ Oy Oy q δ qq οy g g ò 셤 Q δ g ŏ g Qγ οy òγ

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This invention describes a novel antigen useful for immunological determination of anti-human thyroid peroxidase (hTPO) antibody with antigen antibody reaction. The hTPO antibody is prepared by axpression of nucleic acid(s) prepared by substitution, deletion or addition or insertion of one or more bases to the gene, particularly with deleted membrane penetrating area and having molecular wt. of 100 kd, and expressed in insect cells, optionally having a mannose type sugar chain. The antigen is useful for the diagnosis of thyroid diseases and severe myasthenia, lupoid hepatitis, and insulin dependent pediatric diabetes.
Claim 7; Page 7-10; 12pp; Japanese.
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Sequence 2546 BP; 542 A; 804 C; 725 G; 475 T; 0 other;

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81.8%; S	ve 0;	gtgctgtctgtcac 		gcaageg gcaageg	yaatccttt yaatccttt	tgattgcccg tgattgcccg	acctgaaaa acctgaaaa	cattg cattg	cccaaacacttgcctggcgaaca 	9999cgcct 9999cgcct	gtcagccccgagg gtcagcccgagg	ccactgccccggtccgggaggtgacaa 	ocgetattetgaee 	909 	aaaacccat
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Que	Ma	Qy	Oy Dp	Qy Dp	Oy Dp	Qy Dp	Oy Dp	Qy Dp	Oy Dp	oy Ob	OY Db	QY	Qy	QY	Οy

Q	781	atgacttgtgagaaccaaaacccatgttttcccatacaactcccggaggaggcccggccg 84	
Oy Dp	925	gecgegggaacggctgtctgcccttctaccgctcttcggccgcctgcggcaccggggac 98	
ΟŊ	985	ttgggaacctgtccacggccaacccgaggcagcagatgaacgggttg 1	Ó
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Qy Dp	1045	<pre>acctegttcctggacgegtccaccgtgtatggcagctccccggccctagagaggcagctg 11 </pre>	
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λŏ	· α	cottocotgacqqcactqcacacqctqtqqctqcqcqaqcacaaccqcctqqccqqqqq 1	34
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op Op	7		38
οy	1465	gaggcettecagcagtacgtgggtecetatgaaggetatgaetecacegecaaececaet 15	524
Dp	1381	ggccttccagcagtacgtgggtccctatgaaggctatgactccaccgccaaccccac	
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QQ	1501		260
Qy	1645	caggetttetteageecatggaeattaeteegtggaggtggtttggaeceactaataega 17	704
ф	1561	aggetttetteageceatggaeattaeteegtggaggtggttggaeceaetaataega 1	620
Οy	1705	ggccttcttgcaagaccagccaaactgcaggtgcaggatcagctgatgaacgaggactg 17	764
Ор	1621	gccttcttgcaagaccagccaaactgcaggtgcaggatcagctgatgaacgaggagctg 1	089
Οy	1765	acggaaaggctctttgtgctgtccaattccagcaccttggatctggcgtccatcaacctg 18	
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ΟY	82		88
Ор	1741	agaggggccggggaccacgggctgccaggttacaatgagtggagggag	800
δλ			94
οg	1801	ctegectggagaceceegetgaeetgageacagecategecageaggagegtggeegae 1	860
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bacteriolytic; AIDS therapy;
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macrophage; cytolytic;
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                                                                                                                                                                                                                                  Human myeloperoxidase prodn. by transformed eukaryotic cells used to increase cytolytic and bacteriolytic activity in macrophages, eg for treating AIDS or burns
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Pred. No. 4.2e-93;
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56.6%;
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                                                        geogecacgegeetgeggeetgtgegeecgageceggcaacceeggagagaceegg
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This sequence encodes myeloperoxidase. The mature protein portion from residues 156-745 has a molecular weight measured by SDS-PAGE of 90000 Dalton and an optimum PH of 6. It has lectin-combining activity and the ratio of absorbence at 430 nm to that at 280 nm is 0.61. The myeloperoxidase has antibacterial activity and antiviral activity. It also has peroxidase activity. The new myeloperoxidase has a wide antibacterial and antiviral spectrum. The protein was isolated from the peripheral blood of a bone marrow abnormal formation syndrome patient.
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                                                                                                                                                                                                                                                                                                                                                                                           antibacterial; antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Myeloperoxidase useful in antibacterial and antiviral agents - comprises glyco-protein contg. a specified amino acid sequence and having lectin-combining nature
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                                                                                                                                                                                                                                                                                                                                                                                     Myeloperoxidase; lectin-binding activity; anti
peroxidase; peripheral blood; bone marrow; ss.
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/product= Myeloperoxidase
catgaacctggaggcctggagggaaacct 2290
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178..2415
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Matches 1001; Conservative
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eosinophil peroxidase, useful for replacing human 2021 1964 2141 2084 2144 2261 2204 2321 2261 2081 2024 2201 2381 caaactgcaggtgcaggatcagctgatgaacgaggagctgacggaaaggctctttgtgct 1784 tgacctgagcacagccatcgccagcaggagcgtggccgacaagatcctggacttgtacaa tgactggttttggtgggagaacagccacgtcttcacggatgcacagaggcgtgagctgga tgatcggtttttggtgggagaacgagggtgtgttcagcatgcagcagcgacaggccctggc caagetgaatcgtcagaaccaaattgcagtggatgagatccggggagcgattgtttgagca ceteccaggatacaatgeetggaggegettetgtggggeteeeggaageetgaaaetgtgggg toggacagggccctgtttgcctgtctcattgggaagcagatgaaggctctgcgggacgg ccgcgtgggcccactcctcgcctgcatcatcggtacccagttcaggaagctccgggatgg tgccttccaagtcggcaa---attccccgaagactttgagtcttgtgacagcatcactgg gtccaattccagcaccttggatctggcgtccatcaacctgcagaggggccgggaccacgg Nucleotide sequence of the human eosinophil peroxidase (EPO) Human; eosinophil peroxidase; EPO; blood; oxydo-reductase; respiratory system tissue; ss. 2410 2262 catgaacctggaggcctggagggaaacct 2290 2382 attgaacctggcttcctggagggaagcct SARL. BP. (HELI-) HELIX BIOTECHNOLOGIES 2272 98FR-0008280 98FR-0008280 (first entry) DNA; Duport JM; New human recombinant eosinophil peroxidase WPI; 2000-118775/11. AAZ45456 standard; Homo sapiens FR2780412-A1 30-JUN-1998; 30-JUN-1998; 06-APR-2000 31-DEC-1999 Ċ, AAZ45456 Gautier 6 1845 1962 2142 2202 2262 2205 1785 1902 1905 2022 1965 2082 2145 1725 2085 RESULT AAZ45456 CD Ω g Ω g οy g οy Ω δ g Qγ g ò Db ò g Ωy g

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us-08-482-402a-2

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eosinophil peroxidase (EPO). The sequence is derived from a BamHI HindIII fragment. The specification describes the production of human EPO fragments by genetic engineering. The sequence was obtained from total RNA isolated from human blood. The EPO protein is from the family of oxydo-reductases. The molecular mass of the protein is about 71 kba The human EPO can be used in large scale industrial applications, especially for the research of new medicaments, e.g. the toxic effects of natural eosinophil peroxidase on the tissues of the medicament directly acting on the EPO. Antibodies against the EPO protein can be used for immunodetection of the protein.
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Fig 1; 29pp; French
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Sequence 2272 BP; 461 A; 732 C; 627 G; 452 T; 0 other;

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Score 464.2; DB 21; Length 2272;
Pred. No. 7e-92;
0; Mismatches 733; Indels 42;
Query Match 15.1%;
Best Local Similarity 56.0%;
Matches 986; Conservative
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AAF20923 standard; DNA; 2558

RESULT 10

AAF20923 ID AAF2

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AAF20923;

14-MAR-2001 (first entry)

Human eosinophil peroxidase polynucleotide fragment #2490.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; aliraya disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; cancet; ss.

Homo sapiens.

WO200062736-A2

26-OCT-2000.

24-MAR-2000; 2000WO-US08020

06-APR-1999; 99US-0127958

(UYEC-) UNIV EAST CAROLINA

(NYCE/) UNIV EAST CAROLI (NYCE/) NYCE J W.

Nyce JW;

WPI; 2000-679539/66

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -

Disclosure; Page 144-145; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides has replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analysic, munuosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonuclectides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodise, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokines, endogenously produced specific and non-nervous system receptors, CNS and peripheral nervous and non-nervous system fransmitters, defensins, growth factors, vasocative peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonuclectides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, and/or and/or anner, antisense, characterian, characterian, characterian, characterian, characterian, condition and/or palminary transplantation respiratory pulmonary vasocoiated with a disease or condition emphysma, cystic fibrosis (CF), allergic rhinitis (RNS), pulmonary transplantation respiratory pulmonary disease (COPD), pulmonary transplantation relected from pulmonary pulmonary pulmonary incered invention.

Sequence 2558 BP; 527 A; 820 C; 698 G; 513 T; 0 other;

1009 1069 1189 1072 1489 1024 1313 actacagggggtactgctccaatgtggacccacgggtggccaatg---tcttcaccctgg 1369 904 964 acaagtaccgcaccatcactggacggtgcaacaacaagaggagaccttgctaggggcct 451 Gaps tctaccgctcttcggccgcctgcggcaccggggaccaaggcgcgctctttgggaacctgt tgctccgcgtccacggccgcctccgggactccggcgcgcctacctgcccttcgtgccgc ccaaccaggetetggetggetgecegecgagtatgaggatgggetgtegeteceet teggetggacceceageaggaggegeaatggetteettetectettgteegggetgtet tgttcatgcagtggggccagttcattgaccatgacctggacttctccccggagtccccgg gcaaagctgccttcgggggggtctgactgccagatgacttgtgagaaccaaaacccat gttttcccatacaactcccggaggaggcccggccggccgcgggggcaccgcctgtctgccct tgtatggcagctccccggccctagagaggcagctgcggaactggaccagtgccgaagggc tgcacga-----tgacccctgtctcctcaccaaccgctcggcgcatcccct tgtggctgcgcgagcacaaccgcctggccgcgggcgctcaaggccctcaatgcgcactgga tetttatgegagageaeaaceggetggeeacegagetgagaegeetgaateeeeggtgga ccctgagggattacatccccaggatcctgggacccgaggccttccagcagtacgtgggtc cctaccgagactttctgccctggttctgggcaaggcccgggccaggagaaccctgggggc cctatgaaggctatgactccaccgccaaccccactgtgtccaacgtgttctccacagccg acaaatacaggcccatcacaggagcttgcaacaacagagacccccagatggggcgcct gaggetggaacceeggettettgtacaaegggtteecactgeeceeggteegggaggtga caagacatgtcattcaagtttcaaatgaggttgtcacagatgatgaccgctattctgacc ccaaccagattgtgcgcttccccaatgagagactgacctccgaccgtggccgagccctca tectgatggcatggggacaatacategaceaegacategegtteaeaecaeagageaeea catcctttcttccgctcg------gcacctcatgccccaaa ccacggccaacccgaggcagcagatgaacgggttgacctcgttcctggacgcgtccaccg tgctggccatcaaccagcgctttcaagacaacggccgggccctgctgccttcgacaacc gcttcctggcaggtgacacccgatcaacggaaacccccaaactggcagccatgcacaccc gcgcggacgccgtgtaccaggaggcgcgcaaggtcgtggggggcgctctgcaccagatcatca 1193 atggagacaaactgtacaatgaggctcggaagatcatgggggccatggtccagatcatca acaagaacagagtccgcaaccagatcaacgcgctcacctcctttgtggacgccagcatgg cacgogocotgoggootgtgogcocgagocoggcaaccocggagagococg 45; Length 2558; Indels 21; Score 438.2; DB 2 Pred. No. 3.4e-86; Mismatches ö 14.3%; 55.8%; Conservative Similarity 983; Query Match Best Local (1010 1130 1025 1073 1133 Matches 392 512 572 770 632 830 752 950 807 845 905 965 1190 1250 1310 1253 1490 530 590 452 710 990 g 8 g δ g q 쉱 ò g δ g ò δ ò 용 ò g ò g οχ ò a g ŏ ò ά δ 용 δ g δ g

99WO-US17712. 98US-0095212. EAST CAROLINA.

WO200009525-A2.

WPI; 2000-205971/18

(UYEC-) UNIV

Nyce JW;

03-AUG-1998; 03-AUG-1999; 24-FEB-2000

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c.g. tachaeur conditions, respiratory distress syndrome, pain, cystic starthms, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (CODE), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastaise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences of iffer from the previously named sequences. SEQ ID NO:11 to 1680

(AAA32331 to AAA339392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
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Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
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trigger adenosine receptors during metabolism, useful e.g. for tr
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The present invention describes tow according them. In the antisense oligonucleotides and compositions (I) comprising them. In the antisense cligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antilinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with cartivating peptide factors and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chervous system (CNS) and peripheral nervous and non-nervous system creeptors, and peripheral nervous and non-nervous system creeptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, alleranged proteins. The antisense oligonucleotides may be used in this way to treat disorders and/or bronchoconstriction) and/or lung inflammation, alleranged proteins and and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasocoateted with a disease or benefit in period of the profession of the pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD) content antisense present invention describes low adenosine (A) the present invention.

8 other; Sequence 6103 BP; 1218 A; 1863 C; 1727 G; 1287 T;

9 3937 acaagtaccgcaccatcactggacggtgcaacaacaagaggagcccttgctaggggcct 3996 3997 ccaaccaggetetggetegetggetgecegeegagtatgaggatgggetgtegeteeeet 4056 4351 tetaccgetetteggeegeetgeggeaceggggaeceaaggegegetetttgggaacetgt 1009 4449 649 889 949 caagacatgtcattcaagtttcaaatgaggttgtcacagatgatgacggctattctgacc 769 Gaps 530 acaaatacaggcccatcacaggagcttgcaacaacagagaccaccccagatggggcgcct gcaaagctgccttcgggggggggggtctgactgccagatgacttgtgagaaccaaaacccat gttttcccatacaactcccggaggaggcccggccggccgcgggcaccgcctgtctgccct gaggetggaacceeggettettgtacaaegggtteceaetgeeeceggteegggaggtga tcctgatggcatggggacaatacatcgaccacgacatcgcgttcacaccacagagcacca ccaaccagattgtgcgcttccccaatgagagctgacctccgaccgtggccgagcctca tgttcatgcagtggggccagttcattgaccatgacctggacttctccccggagtccccgg 4237 ccagagtggccttcactgcaggcgttgactgtgagaggacctgcgcccagctgccccct -----gcacctcatgccccaaa 45; 14.3%; Score 438.2; DB 21; Length 6103; 55.8%; Pred. No. 4.2e-86; Pred. No. 4.2e-86; 0; Mismatches 733; Indels _ = = = = = catecetttetteegeteg-------Matches 983; Conservative Query Match Best Local Similarity 290 650 710 4177 830 950 4117 4352 770 890 4297 à g Ω a ò g οy Q Qγ Ω δy g ò g οy g ö Q

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                                                                                                                                                                                                                                    PRG2; p53 target; human; modulate; cell proliferation; immunomodulatory; chromosome 2p24.3; cytostatic; gene therapy; tumour cell; inducer; diagnosis; therapeutic; proliferative disease; cell cycle arrest; cancer; treatment; apoptosis; knockout animal; cancer susceptibility; dpxn; hpxn; peroxidasin; redox-regulation; reactive oxygen species; ROS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is the complete CDNA of PRG2 gene, whose RNA levels are upregulated in response to induction of p53 activity in human colon cancer EB1 cells. This sequence is the human homologue (hpxn) of Drosophila peroxidasin gene dPxn, that is expressed in heart, placenta, spleen, ovary and intestines. PRG2 is involved in p53-mediated growth suppression pathways and plays a role in redox regulation. It is
                                                                                                                                                                                                                                                                                                                                                    /product= "Human PRG2 protein"
/note= "Human homologue (hPxn) of Drospohila peroxidasin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New p53-inducible isolated nucleic acid molecule including open reading frame encoding human homolog of Drosophila melanogaster peroxidasin, useful e.g. in detection and treatment of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                    /product= "Mature human PRG2 protein"
/note= "Exhibit growth inhibitory effect upon over
5572 tcagagccaacatctaccctcggggctttgtgaactgcagccgtatccccaggttgaacc
                     5512 tttccttgtctcgaattatatgtgacaataccggtatcaccacggtttcaagggacatct
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                                                                                                                                                                                                                    Human p53 target molecule, PRG2 cDNA.
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haem-peroxidase that increases the intracellular content of reactive oxygen species (ROS). They are potential targets of p53 regulatory activity and are useful for modulation of cellular proliferation. PRG2 gene is localised to human chromosome 2p24.3. The PRG target molecules have cytostatic and immunomodulatory activity. PRG polynucleotides, proteins and antibodies are useful as diagnostic and therapeutic agents for detection and treatment of cancer and other proliferative diseases. The gene/CDNA may be used for gene therapy, to restore a gene function downstream of p53, that cannot be activated in the p53-deficient tumour epl. Antibodies can be used as inducers of cell cycle arrest and/or apoptosis. The DNA sequences can be used to generate 'knockout' animals as a model of cancer susceptibility.
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AMW8130) of the new human melanoma associated antigen MG50. Subtractive hybridisation of cDNA obtained from melanoma cell line MSM M-1 against an excess of mRNA from squamous lung carcinoma cell line Lu-1 was used to clone cDNA sequences differentially expressed in MSM M-1 cells. 12 Candidate clones were obtained, 6 of which were considered novel. 1 Clone, designated melanoma gene-50 (MG50), was selected for further characterisation. The 5' region of the gene has yet to be obtained. MG50 mRNA was detected in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  well as methods of stimulating T lymphocytes that are reactive against cancer cells expressing MG50 and for treating an individual
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                                                                                                                                                                                                                                                                             550; melanoma gene-50; melanoma associated antigen; human; cell epitope; cancer; lung cancer; rhabdomyosarcoma; diagnosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                products for the detection, treatment and prevention of MG50-expressing cancers, e.g. melanoma, lung cancer or
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Length 6847;

Score 417; DB 20; Pred. No. 1.8e-81;

13.6%; 54.9%;

Query Match Best Local Similarity

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                                                                                  2251 gacatgtgcttccaccagaagtaccggacgcacgacggcacctgtaacaacctgcagcac
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us-08-482-402a-2.rng

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The sequence was obtd. from a cDNA library prepd. from a bovine milk gland. The bovine clone was used to screen a similar human cDNA library (see AAQ11843). The sequence encodes 712 amino acids including the signal sequence and prosequence. Two putative signal peptidease cleavage sites and two possible alternative termini of the cleaved propeptide are indicated. The LPO protein is an antimicrobial useful for the treatment of infectious diseases and for preservation of perishable goods such as foods, beverages, and commetics. It is active against fungi, viruses, protozoa and bacteria, and is also effective against malignancies, autoimmune disease and transplant rejection. It can also be used as an agent
                                                                                                                                                                                                                                                                                                                                      Recombinant lacto-peroxidase and deoxyribonucleic acid encit - used to treat auto-immune diseases, preserve prod. e. cosmetics, and to crosslink ligands to proteins.
                                                              507..2258
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/*tag= b
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423..2258
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                                 mat_peptide
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Sequence 2710 BP; 613 A; 848 C; 689 G; 560 T; 0 other

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                                        48;
Length 2710;
                                    0; Mismatches 750; Indels
tch 12.6%; Score 386; DB 12; al Similarity 54.5%; Pred. No. 8.1e-75; 954; Conservative 0; Mismatches 750;
                      Best Local Similarity
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